

### Statement of Considerations

REQUEST BY THE GENERAL ELECTRIC COMPANY FOR AN  
ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN  
SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER  
PHASE IV OF UT-BATTELLE SUBCONTRACT NO. 85X-SZ581C UNDER  
PRIME CONTRACT NO. DE-AC05-00OR22725; DOE WAIVER DOCKET  
W(A)-02-010 [ORO-769]

The General Electric Company (GE) has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under Phase IV of UT-Battelle, LLC Subcontract No. 85X-SZ581C under Prime Contract No DE-AC05-00OR22725. In addition, GE wishes to acquire a nonexclusive, paid-up irrevocable, worldwide license to make, have made, and use certain subcontractors' inventions and discoveries made under this subcontract when the subcontractor has agreed to such license. The work is sponsored by the Office of Industrial Technologies.

The original scope of work contemplated three phases. An advance waiver has been previously granted to GE for Phases I-III in 1999 (W(A)-98-008 ORO-740). The objective of the new Phase IV is to select for commercialization an advanced high-gradient casting process from two casting processes that have been developed and the transition of the gelcast of silica core technology to a commercial process. Because the Phase IV work was not part of the original scope of work and the earlier waiver did not apply to any modification or extension of the cost-shared contract where, through such a modification or extension, the purpose, scope or cost of the contract has been substantially altered, a new waiver request has been submitted. The terms of this waiver remain identical to the terms of the previous waiver granted to GE.

The dollar amount of Phase IV of subcontract is \$3,005,957 with GE and its subcontractors cost sharing 33% of the work. The period of performance is 15 months.

GE's experience and expertise will contribute substantially to development of the inventions made under the subcontract. GE has extensive experience in directional solidification processing and associated ceramics as shown by its listing of representative patents. GE is also a leading manufacturer of electrical generation equipment.

GE has made a substantial financial and other investment directly related to the work to be performed under this subcontract. GE has done over 30 years of research on directional solidification processing and mold and core technology. For this subject subcontract, a novel liquid metal cooling furnace has been designed and built, and a facility for constructing shell molds has been updated at a total 1997-98 cost of \$2 million. A subcontractor, PCC Airfoils, has constructed, at its own expense, a high gradient furnace at its facility.

GE does not itself manufacture single crystal or columnar casting or cores for such castings, but buys castings from vendors such as Howmet and Precision Castparts, who will be subcontractors to GE under this effort. As stated, GE wishes to acquire a nonexclusive, paid-up irrevocable, worldwide license to make, have made, and use certain subcontractors' (those not subject to Public Law 96-517) inventions and discoveries made under this contract. Such license does not include the right to sublicense. Title to subject inventions would remain with the subcontractors. In addition, it is noted that this waiver would not extend to inventions made by DOE laboratories who may perform work under this effort.

GE would only obtain such rights in its subcontractors' inventions only if the subcontractor agrees to GE obtaining rights in these inventions by providing a letter to DOE containing a statement or by signing a subcontract having terms indicating such acknowledgment and agreement. Based on the information provided by GE in its petition and subsequent letter to DOE, such an arrangement would provide economic incentives to the casting vendor subcontractor to commercialize the liquid metal cooling process and also to the core vendor subcontractors to commercialize the alumina core process, since both vendors would retain patent rights, and GE would be permitted to utilize the technology and acquire the technology from competing vendors. It is noted that PCC Airfoils, a subcontractor to GE in this effort, has already provided such written agreement for GE to obtain license rights in its inventions.

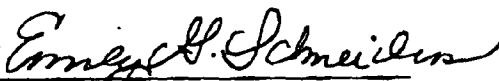
GE has agreed to accept the attached DOE waiver terms and conditions if the requested waiver is granted. Specifically, GE agrees to abide by the conditions set forth at 35 U.S.C. §202-204 relating to the Government license, march-in rights, and preference for U.S. industry.

GE has also agreed that this waiver be subject to the attached U.S. Competitiveness (paragraph t) and Adequate Recognition (paragraph u) Clauses. The Adequate Recognition clause requires the Participant to obtain DOE approval of any transfer or other alienation of any intellectual property first specifically developed by the Participant in the performance of the work funded under the DOE ATS Program -- including technical data and subject inventions -- (hereafter termed "Intellectual Property") to any foreign company or American subsidiary of a foreign company. Such approval is contingent on agreement by the company to whom such rights are transferred or otherwise alienated to substantially manufacture any specifically developed ATS products embodying any such Intellectual Property or produced through the use of any such Intellectual Property in the United States. In the event the company acquiring such rights does not meet the substantial United States manufacture requirement, the clause provides for repayment of the funds contributed by DOE to all phases of the Participant's ATS program, licensing or return to DOE of foreground Intellectual Property and licensing of background Intellectual Property.

Granting of the waiver should have little effect on competition since the end products produced from the developed technology would be cast by many GE vendors who typically compete for this work.

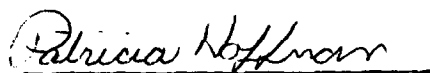
Grant of the requested waiver should serve as encouragement to other DOE contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the acceptable level of cost sharing by GE and the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver for worldwide patent rights in subject inventions and a license in subcontractors' subject inventions be granted.

  
 Emily G. Schneider  
 Assistant Chief Counsel  
 for Intellectual Property

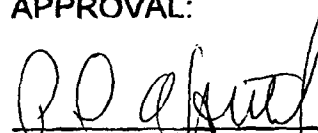
Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared contract where, through such a modification or extension, the purpose, scope or cost of the contract has been substantially altered.

CONCURRENCE:

  
 Patricia A. Hoffman  
 EE/Office of Industrial Technologies  
 Program Manager

Date: 6/11/02

APPROVAL:

  
 Paul A. Gottlieb  
 Assistant General Counsel for  
 Technology Transfer and  
 Intellectual Property

Date: 6-14-02